PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Facilitators and barriers to participation of private sector health facilities in government led schemes for maternity services in India: a qualitative study.
AUTHORS	Yadav, Vikas; Kumar, Somesh; Balasubramaniam, Sudharsanam; Srivastava, Ashish; Pallipamula, Suranjeen; Memon, Parvez; Singh, Dinesh; Bhargava, Saurabh; Sunil, Greeshma; Sood, Bulbul

VERSION 1 - REVIEW

REVIEWER	Dr. Meenakshi Gautham London School of Hygiene and Tropical Medicine, UK
REVIEW RETURNED	28-Sep-2016

GENERAL COMMENTS	This paper attempts to address the important challenge of setting up effective public private partnerships for maternity care in two poor states in India that are also lagging behind in health. The paper is well written and the topic is very relevant to maternal healthcare in India, but the research question is rather general and insufficiently grounded in the literature on PPPs in maternal health in India. It focuses on empanelment of private facilities almost as an end in itself. In my view the study and the research question need to be grounded in a more critical analysis of the present evidence around the failures and successes of PPPs for maternity care in India. The research questions will need to reframed by building on the existing knowledge base and some of the data will have to be re-analysed and unpacked. The present findings are of limited value otherwise. I have provided my detailed comments below. I hope you will find these useful in thinking through further. Comments This paper attempts to address the important challenge of setting up effective public private partnerships for maternity care in two poor states in India that are also lagging behind in health. The paper is well written and the topic is very relevant to maternal healthcare in India, but the research question is rather general and insufficiently grounded in the literature on PPPs in maternal health in India. It focuses on empanelment of private facilities almost as an end in itself. In my view the study and the research question need to be grounded in a more rigorous analysis of the present evidence around the failures and successes of PPPs for maternity care in India, and build on that knowledge base. The findings are of limited

	value otherwise. My specific comments are as follows: 1. The introduction starts off well by showing the dominance of the private sector, but fails to emphasise the critical factors that can potentially impede the success of PPPs: (a) that more than 70% of the formal private sector is in urban areas and caters to the better off population segments; (b) rural areas have mainly informal and unregistered providers and facilities (and some AYUSH facilities now around the city outskirts), that most state governments hesitate to partner with due to their legal status. Institutional deliveries in rural areas are happening mostly in government facilities (and the authors have stated this) where most of the population resides, but since private facilities are far and out of reach of these populations, how can effective partnerships be set up that deal with this inherent contradiction posed by the skewed distribution of the formal sector? This fundamental question needs to be answered first, even before trying to bring more private facilities on board and considering their operational and other challenges. I noted that on page 7 in lines 126-129, you have mentioned a variety of ways that private facilities can support the public sector in this scenario, like through referrals and specialist services etc. I liked that, but these aspects have not been explored in your study findings which focus only on issues of empanelment currently, almost as an end in itself. I did not find results that distinguished caesarean sections from normal delivery care and issues around these. 2. To illustrate my point above, there is a large volume of literature on the Chiranjeevi scheme that shows the problems faced by rural women in accessing the empanelled private facilities that were based entirely in cities. Moreover, a 2014 analysis of the scheme by Mohanan et al in the Bulletin of the WHO further shows that the scheme appears to have had no significant impact on institutional deliveries or maternal health outcomes. These findings need to be brought into the picture and thought through while framing any future research questions around PPPs for maternal care. Since the data in your study is drawn entirely from facilities in big cities, it is even more important to consider the available evidence on successes and failures of partnering with city based private facilities (in order to improve the accessibility and availability of maternity care for the rural and urban poor), and ask what should be the nature of PPPs with these city based facilities, which population segments can realistically benefit from these PPPs and what are the barriers in setting these partnerships? 3. By contrast, in urban areas the majority of institutional deliveries are already happening in private facilities, so they may already be quite stretched by way of infrastructure and resources. What would PPPs mean for them in this context, especially if these facilities were asked to admit poor, rural and uneducated women? Are these even attractive for

	private facilities which may already be doing quite well? Which ones are most likely to be attracted towards PPPs? These issues need to be explored in your data. You have mentioned the Mamta scheme which has tried to utilise PPPs for poor slum women in Delhi. There are again some very important lessons from this scheme as well as the others that need be analysed in your introduction and taken stock of while framing the research question. I did note that you have brought up this issue in the discussion ('comfort zone' of facilities) but it needs to be explored in your results. 4. There is increasing evidence that the quality of care is poor in private facilities as well. For maternity services the issue of unnecessary C-secs is especially relevant, and will need to be addressed in any PPP as it is the most easy way of frauding the system. Do you have any data from your government respondents around issues of fraudulent reimbursements, when they talk about trust? 5. Methods section – please define or describe a 'snapshot narrative design'. Good if you can provide a reference also. It sounds like you have used a regular qualitative study approach with in-depth interviews, so I am not sure what you mean by a snapshot narrative design. 6. The results section starts rather abruptly with 'barriers to empanelment'. It will be good to provide a profile of the facilities and providers that were interviewed. Who were your respondents, what was the size range of the facilities, where were they located, new vs old, was there any variation in their clientele? Were they mainly delivery/maternity centres or also provided general in-patient care? Were there any facilities in your sample that were empaneled? If so, can you compare their experiences/responses from the rest who were not empaneled? 7. The section on low reimbursements is also quite general. Can you give some examples of the cost range for normal deliveries and C-secs in these facilities, and did you explore what could be the minimum acceptable costs in this scenario. I liked the way you discussed this issue in the discussion section – you have highlighted the complications created by the variation in the costs and what this implies for the government subsidy which is currently standradised. However in the results section also, this issue of costs can be complemented with some cost estimates. 8. Page 18, lines 301 – 308: This section needs to be better explained. There is a contradiction between 'rigid' guidelines and 'unclear administrative issues'. If the guidelines are called rigid then by corollary the people should know them well enough to call them rigid. But it seems there is lack of awareness as well. This section needs to be unpacked and maybe you can describe here (or in an endnote) something about the guidelines, or provide a reference. This is quite

	general and vague at the moment. 9. Page 21 – quote in lines 375-377 has some clinical terms. It will be good to explain these in a couple of words in brackets. 10. Page 20 – Client level barriers. It is in this section that you can bring in a lot more of in-depth information about issues around transportation and travel, the effect of the presence of poor clients on the wealthy clientele of private facilities etc (you have mentioned this in passing in the discussion, but here is where it should first be stated..it is a very very important issue and you need to discuss it later properly in the discussion, and compare it with the findings of other studies of PPPs). 11. Page 21 – facility level barriers. This section needs more clarity with concrete examples of costs as well as what is meant by the varied nature of the private sector. 12. Page 24, lines 425 – 428. Here you have explicitly stated that many private providers are in a comfort zone with their fee paying patients. This is exactly what I have been pointing out. What is there in these PPPs to really attract some if not all of the facilities? If they are already doing well, why should they be interested in any attending to any government subsidized patients? 13. The discussion section can be shortened by summarising the key findings in one or two paras, before you compare them with other studies and discuss the most important ones, and highlight the new findings.

REVIEWER	Matthias Nachtnebel Germany
REVIEW RETURNED	27-Oct-2016

GENERAL COMMENTS	I would like to thank you for sharing this draft. I have read it with interest but do have some major and minor comments which I would like to share with you hereby. I believe that your publication has to offer interesting messages to policy makers but would require substantially more information. Hopefully, my comments will prove useful in doing so. 1- Your list of references is rather short but one study you keep referencing to is the one by Gaguly et al. Thus, I searched for this publication and conclude that your draft actually aims for exactly the same. You seem to borrow the entire set of methods, including your set of questions for the interview, and unsurprisingly come to almost the same (with some noteworthy differences) conclusions. In my understanding, you have to highlight this fact more clearly and furthermore state why your study was still required (e.g. different scheme, different setting) and where it adds additional benefits. 2- Your study question and the purpose of your study is not completely clear. Why would you look into barriers? There is no

	inherent benefit in those; isn't the purpose to provide policy makers with some options to improve empanelment of private providers? 3- Although I am admittedly no expert in the field of qualitative studies I feel that your results section is rather thin. It consists mostly of statements of single interviewees and lacks a summary of most common opinions in regards of barriers/facilitators. Therefore, I don't understand what the majority thought, which responses were common and which one rather extreme opinions. 4- In addition, you have not demonstrated that the quality in the private sector is any better than in the public; nor that there is significant overburdening in the public sector; or that is a relevant factor for low quality. 5- Moreover, you have not included any private provider from rural areas, and yet this is exactly the area where the problem seems to be most acute. Sow how can you draw conclusions for the scheme from your sample (you have mentioned that in one sentence only in the limitations section). 6- Your article provides no description of the schemes under scrutiny here; so I feel completely lost in putting the results and conclusions into context. Who are actually the beneficiaries, how many, which providers are eligible; how many (public & private) have been empanelled, which medical services are provided, how are these reimbursed, since when are private providers empanelled and was their participation ever since low (or have they become only recently eligible) etc? 7- Without this information for instance the statement in the introduction that only X% of woman knew about empanelled providers is even less conclusive 8- Jhpiego- purpose? 9- If focus is on improving quality in the private sector- is it even better? 10- Results: please provide a summary of included providers (size of facility, location, empanelled or not, number of deliveries performed, etc) 11- On p. 19 you mention the view by the OP official that the scheme is very transparent and easy to enroll. So apparently there are contradicting perceptions in the two sectors on this? 12- P.22. statement:…and not just in health care? What is this supposed to mean? 13- P 25: if the quality in the public sector is as low as you claim: why / how can the private sector feel that participation in a public scheme would brand them as of high quality? And Gaguly I believe reported the opposite, correct? 14- Discussion: you introduce some new results not mentioned in the respective section here (e.g. single most important factor was low reimbursement- not mentioned in the results section- as you have not summarized frequencies of responses there): 15- And I felt confused by the statement on p. 28: although reimbursement rates were higher in Chirajeevi scheme the private sector considered these untenable. So, is increasing rates the solution? To which level would be required? And what in comparison to providing these funds to the public sector instead? 16- P.28 the statement on CCT is not clear. Would it be possible that women receive these CCTs and then don't see a private but a public doctor to keep the money? Then this would be big incentive for not seeing the private provider. And you also mention vouchers in this context. So is it actually a voucher scheme? 17- P 30: the last few sentences are not clear. What is the NHM ecosystem? 18- Where is accountability under scrutiny? And how is supposed

	being held accountable by whom? 19- You mentioned oversight by the government of India. But roles and functions of central government vs. the state ones are not clear.

REVIEWER	Abhishek Sharma Boston University, USA
REVIEW RETURNED	03-Nov-2016

GENERAL COMMENTS	Thanks for giving the opportunity to review this manuscript. The study subject– public private partnerships for healthcare (maternity) service delivery – in general is of public health significance in India and elsewhere. This is a simple narrative-based qualitative study (no statistics/analytics involved) and highlight barriers to PPP in maternity services in India based on stakeholder interviews from two Indian states. However, this manuscript needs some revisions for clearly explaining the research question on hand, methodology, and presentation of results. I have tried to provide constructive comments to help authors revise this manuscript. I will be happy to review revised manuscript. On page 7 (line 130-136) Please mention the full form for JSY (Janani Suraksha Yojana) in its first mention. In my opinion, since the research study aims to identify the barriers and facilitators of public private partnership for pregnancy labor and delivery services, this paragraph/text about JSY is most important in the 'introduction" section but not well done. Authors must understand that the international readership of BMJ Open would not necessarily be familiar with Indian Government's JSY scheme and its other details that are required to follow this study. Therefore authors need to provide a clear, descriptive account explaining what JSY is, since when and what populations does it focuses, how exactly women/populations are incentivized for institutional delivery and in which healthcare sector, etc. On page 7 (Line 142-143) Are Chiranjeevi yojna in Gujarat and Janani Sahyogi Yojana in Madhya Pradesh different forms or state-specific names of the National JSY in states Gujarat and Madhya Pradesh? I suggest the use word "state" when mentioning a state's name for first time. On page 7 (line 130) What do the authors mean by "Guidance is in place in India for creating effective partnerships"? As a reader I would wonder: what kind of guidance, whose partnerships with private sector, and for improving quality of what services. This is one example of unclear English used often in this manuscript. Please revise wherever required. On page 7 (line 126-129): The statement "can share burden of public sector facilities and decongest them" appear to be conjecture than evidence-based. Please provide references to some previous research studies, from different disease/healthcare areas, which found and supported that leveraging the private health sector in India would help provide better healthcare or medicine delivery in India, as seen in case of tuberculosis (http://bit.ly/2ejuXju); vaccines (http://bit.ly/1RhKXz5); diabetes (http://bit.ly/2fAo5hT) etc. On page 8 (line 149-151): please clarify that the "(public-sector's) partnership with the private sector facilities under JSY…" was very

	poor in what terms? The line (171-174), “Project also involved conducting low dose high frequency…and assessment” needs clarity”. On line 175 (page 9), study involved which “all these stakeholders”? In line 178 (page 9), please mention that “the 2 states” authors referring to are the states of Jharkhand and Uttar Pradesh? In the methods section: The text in lines 187-193 (page 11) could be shorten without losing the content/message. Lines 203-205: may be it’s not necessary to mention where the interviews as in line 191-192 (page 10) it is clear where interviews were conducted. In line 214 (page 12): It is unclear that the qualitative expert translated the interviews from which language to which? From local language (language A, Language B) to English !! Results section: This section could benefit from reducing the number of quotes from study participants and a relatively more detailed account reporting authors’ findings. Since this is a qualitative, narrative-oriented study, it is imperative that the authors are clear with their English, expression and tone. Please revise the manuscript for instances such as those mentioned below. Please provide the available numbers/data (quantitative observations) where available. For instance: in line 238-239 (page 13), how big or small are these amounts to be unrealistic? In line 254 (page 14), what does ‘rates’ mean? It would not be appropriate to have readers guess that the paper is referring to prices/reimbursements. Same for “charges” in line 261. Therefore, wherever need include the actual meaning in parenthesis after the vague words in quotes for clarity purpose. Who is “he” in line 282 (page 15), “this” in line 328 (page 18) and elsewhere; could you have so in parenthesis as done in line 317 (page 17)? And, “rigid policies” in line 303 (page 17) means? Whose advocacy in line 446 (page 25)? In lines 375-377 (page 21), what is not possible to do and at what place? I can guess but please provide details in [parenthesis]. Please clarify “raising resources” in line 336 (page 19)? While I can guess what authors are referring to, the text needs to be explicit in this narrative based study. In lines 397-399, I think authors are referring to “PRIVATE” hospitals, please clarify? Also please spell out OT in line 397-398 (page 22). On page 12 (line 228): study subjects could be replaced with study participants as used by authors earlier. In lines 436-438 (page 24), while discussing private-sector participation, what do authors refer to as national level? Please clarify that “their” refers to private-sector in sub-heading in lines 555-556 (page 31). Regarding information technology use for linking healthcare and reimbursement information, could India use adhaar card interface? See Shiva et al (http://bit.ly/2ejotLX) Regarding recommendations, it is possible to suggest some sort of coordination mechanisms between government ANC program and

	JSY program as several physicians complained about poor ANC among the clients as a major hurdle to success of JSY?

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

1. The introduction starts off well by showing the dominance of the private sector, but fails to emphasise the critical factors that can potentially impede the success of PPPs: (a) that more than 70% of the formal private sector is in urban areas and caters to the better off population segments; (b) rural areas have mainly informal and unregistered providers and facilities (and some AYUSH facilities now around the city outskirts), that most state governments hesitate to partner with due to their legal status. Institutional deliveries in rural areas are happening mostly in government facilities (and the authors have stated this) where most of the population resides, but since private facilities are far and out of reach of these populations, how can effective partnerships be set up that deal with this inherent contradiction posed by the skewed distribution of the formal sector? This fundamental question needs to be answered first, even before trying to bring more private facilities on board and considering their operational and other challenges. I noted that on page 7 in lines 126-129, you have mentioned a variety of ways that private facilities can support the public sector in this scenario, like through referrals and specialist services etc. I liked that, but these aspects have not been explored in your study findings which focus only on issues of empanelment currently, almost as an end in itself. I did not find results that distinguished caesarean sections from normal delivery care and issues around these.

We have revised the introduction section of our manuscript keeping the above mentioned important points in mind. While we have acknowledged that the current distribution of formal private sector (mostly in urban areas) makes it difficult to have effective partnerships in terms of catering to the needs of rural population, we have emphasized on the fact that it can still play an important role in decongesting the overburdened public tertiary level health care facilities (district hospitals).

We have highlighted the fact that private sector can also play an important role in meeting the specialist maternity care requirements as most of the obstetricians in India are serving in the private sector. We have done some additional analysis of our data and presented themes on general perceptions, expectations and motivations of study participants from accreditation schemes in the results section. Under these new themes, government officials do acknowledge that such schemes have the benefit of the utilising existing resources of the private sector (specialist care, caesarean sections, etc) to fill the gap where government services were lagging.

Also, the fact that getting empaneled into such government schemes requires the private facilities to meet certain level of standards can itself facilitate good quality care to its existing users has been added in the introduction section.

We would also like to bring to the reviewers' notice that while it is true that all the private practitioners we interviewed were based in urban areas; all of them reported that their clientele came from both rural and urban areas. Out of the 18 private practitioners we interviewed, 8 reported that majority of their clientele were from the surrounding rural areas. We have included this information in the results section.

2. To illustrate my point above, there is a large volume of literature on the Chiranjeevi scheme that shows the problems faced by rural women in accessing the empanelled private facilities that were based entirely in cities. Moreover, a 2014 analysis of the scheme by Mohanan et al in the Bulletin of the WHO further shows that the scheme appears to have had no significant impact on institutional deliveries or maternal health outcomes. These findings need to be brought into the picture and thought through while framing any future research questions around PPPs for maternal care. Since the data in your study is drawn entirely from facilities in big cities, it is even more important to consider the available evidence on successes and failures of partnering with city based private facilities (in order to improve the accessibility and availability of maternity care for the rural and urban poor), and ask what should be the nature of PPPs with these city based facilities, which population segments

can realistically benefit from these PPPs and what are the barriers in setting these partnerships?
We have included these important findings in the revised introduction section of our manuscript. We have also clarified in the first paragraph of the results section (profile of participants) that all the private practitioners we interviewed had their private practice in tier-2 cities of Uttar Pradesh and Jharkhand. All of them reported that their clientele came from both rural and urban areas and 8 out of the 18 practitioners reported that majority of their clientele was from the surrounding rural areas.

3. By contrast, in urban areas the majority of institutional deliveries are already happening in private facilities, so they may already be quite stretched by way of infrastructure and resources. What would PPPs mean for them in this context, especially if these facilities were asked to admit poor, rural and uneducated women? Are these even attractive for private facilities which may already be doing quite well? Which ones are most likely to be attracted towards PPPs? These issues need to be explored in your data. You have mentioned the Mamta scheme which has tried to utilise PPPs for poor slum women in Delhi. There are again some very important lessons from this scheme as well as the others that need be analysed in your introduction and taken stock of while framing the research question. I did note that you have brought up this issue in the discussion ('comfort zone' of facilities) but it needs to be explored in your results.

We have included the learnings from similar schemes in our introduction section.

We have also highlighted the fact that government tertiary health care centers (district hospitals) – which are usually 1 or 2 in a district - cater to around 45% (as per latest HMIS data) of all institutional deliveries happening in the country. The private sector can play a pivotal role in decongesting these overburdened facilities.

Also, we have done some additional analysis of our data and presented themes on general perceptions, expectations and motivations of study participants from accreditation schemes in the results section. Under these new themes, private practitioners do talk about their motivations (social service, added legitimacy, increased footfall etc.) for joining such schemes.

4. There is increasing evidence that the quality of care is poor in private facilities as well. For maternity services the issue of unnecessary C-secs is especially relevant, and will need to be addressed in any PPP as it is the most easy way of frauding the system. Do you have any data from your government respondents around issues of fraudulent reimbursements, when they talk about trust?

We did additional analysis of our data and did come up with additional information under the category of finance related barriers (theme – system level barriers). Government officials did talk about private practitioners trying to fraud the system to break even - a finding which we have included in the results section.

5. Methods section – please define or describe a 'snapshot narrative design'. Good if you can provide a reference also. It sounds like you have used a regular qualitative study approach with in-depth interviews, so I am not sure what you mean by a snapshot narrative design.

We agree that it's a regular qualitative narrative design using in-depth interviews. We have made the requisite changes in the methods section.
6. The results section starts rather abruptly with 'barriers to empanelment'. It will be good to provide a profile of the facilities and providers that were interviewed. Who were your respondents, what was the size range of the facilities, where were they located, new vs old, was there any variation in their clientele? Were they mainly delivery/maternity centres or also provided general in-patient care? Were

there any facilities in your sample that were empaneled? If so, can you compare their experiences/responses from the rest who were not empaneled?

We have added a paragraph in the beginning of the results section where we have described the profile of study participants.

7. The section on low reimbursements is also quite general. Can you give some examples of the cost range for normal deliveries and C-secs in these facilities, and did you explore what could be the minimum acceptable costs in this scenario. I liked the way you discussed this issue in the discussion section – you have highlighted the complications created by the variation in the costs and what this implies for the government subsidy which is currently standradised. However in the results section also, this issue of costs can be complemented with some cost estimates.

We did collect this information on costs and acceptable reimbursements. We have added this information in the results section.

8. Page 18, lines 301 – 308: This section needs to be better explained. There is a contradiction between 'rigid' guidelines and 'unclear administrative issues'. If the guidelines are called rigid then by corollary the people should know them well enough to call them rigid. But it seems there is lack of awareness as well. This section needs to be unpacked and maybe you can describe here (or in an endnote) something about the guidelines, or provide a reference. This is quite general and vague at the moment.
We have revised the segment and clarified on the same.

9. Page 21 – quote in lines 375-377 has some clinical terms. It will be good to explain these in a couple of words in brackets.
As per the suggestion of reviewer 3 we have cut down on the number of quotes in the results section. We have removed this particular quote from the revised results section.

10. Page 20 – Client level barriers. It is in this section that you can bring in a lot more of in-depth information about issues around transportation and travel, the effect of the presence of poor clients on the wealthy clientele of private facilities etc (you have mentioned this in passing in the discussion, but here is where it should first be stated..it is a very very

important issue and you need to discuss it later properly in the discussion, and compare it with the findings of other studies of PPPs).

We have made the requisite changes in both the sections.

11. Page 21 – facility level barriers. This section needs more clarity with concrete examples of costs as well as what is meant by the varied nature of the private sector.
We have revised this section for better clarity as per the suggestions.

12. Page 24, lines 425 – 428. Here you have explicitly stated that many private providers are in a comfort zone with their fee paying patients. This is exactly what I have been pointing out. What is there in these PPPs to really attract some if not all of the facilities? If they are already doing well, why should they be interested in any attending to any government subsidized patients?

We have done some additional analysis of our data and presented themes on general perceptions, expectations and motivations of study participants from accreditation schemes in the results section. Under these new themes, private practitioners do talk about their motivations (social service, added

legitimacy, increased footfall etc.) for joining such schemes.

13. The discussion section can be shortened by summarising the key findings in one or two paras, before you compare them with other studies and discuss the most important ones, and highlight the new findings.

We have made the suggested changes in the revised discussion section.

14. Reviewer: 2
1. Your list of references is rather short but one study you keep referencing to is the one by Gaguly et al. Thus, I searched for this publication and conclude that your draft actually aims for exactly the same. You seem to borrow the entire set of methods, including your set of questions for the interview, and unsurprisingly come to almost the same (with some noteworthy differences) conclusions. In my understanding, you have to highlight this fact more clearly and furthermore state why your study was still required (e.g. different scheme, different setting) and where it adds additional benefits.
While Ganguly et al focuses on the Chiranjeevi Yojana – which was launched in one specific state (province) of India, our study focuses on Janani Suraksha Yojana which is a national level scheme. Also, though the intention of both schemes is similar, their structure (in terms of amount reimbursed, empanelment criteria etc.) is different. While Ganguly et al sought opinions of only private practitioners; our study involves IDIs (in-depth interviews) with other important stake holders like the government officials and FOGSI members as well. This in turn provides a more holistic picture of the issues involved.
We have also done some additional analysis of our data and presented additional themes like general perception of private practitioners about empanelment in the JSY scheme, expectations from the program and previous experiences of private practitioners with such schemes. .
2. - Your study question and the purpose of your study is not completely clear. Why would you look into barriers? There is no inherent benefit in those; isn't the purpose to provide policy makers with some options to improve empanelment of private providers?
In our study, we tried to look at both barriers and facilitators for private providers for participation in the scheme In the study, we also explored their recommendations for improvement in the processes to increase private sector participation. Based upon our findings, we have made some context relevant recommendations for improving the system for engaging private providers in the scheme - which would be of interest to the policy makers. Also, we have done some additional analysis to bring to the fore the perceptions, expectations and experiences of private practitioners with accreditation schemes.
Based upon your recommendations, we have also revised our introduction section and tried to better frame our research question.
3. Although I am admittedly no expert in the field of qualitative studies I feel that your results section is rather thin. It consists mostly of statements of single interviewees and lacks a summary of most common opinions in regards of barriers/facilitators. Therefore, I don't understand what the majority thought, which responses were common and which one rather extreme opinions.
Being a qualitative research, we have presented to the audience the major themes that emerged from analysis of the narratives (data) of various stakeholders on this issue. For opinions, which were not common, we have added this information when we have presented such opinions in the results section.
4. In addition, you have not demonstrated that the quality in the private sector is any better than in the public; nor that there is significant overburdening in the public sector; or that is a relevant factor for low quality.
We have revised the introduction section of our manuscript where we have explained about the over burdening of public sector, Also, we have elaborated on the quality aspect. We are not commenting on the quality of services being provided in the private health facilities. We feel that the private sector

can contribute to the overall goal of quality improvement for maternal health in India by two important ways—first, by sharing the burden of public facilities and filling the specialist care gap, and the fact that by virtue of being enrolled in government's scheme, they themselves would be required to meet the quality benchmarks—as set by the government in their empanelment guidelines—thereby improving quality of services to the clients they are already catering. We have revised our introduction section to better express these views.

5. Moreover, you have not included any private provider from rural areas, and yet this is exactly the area where the problem seems to be most acute. Sow how can you draw conclusions for the scheme from your sample (you have mentioned that in one sentence only in the limitations section).

We agree that all the private providers we interviewed in our study are from the urban areas. This is primarily because the project under which this research study was done is confined to tier 2 cities of Uttar Pradesh and Jharkhand. We have mentioned this as one of the limitations of our study.

We would also like to state that in India, majority of the qualified private practitioners - who can be accredited under the government schemes as per the current guidelines - practice in the urban centers. Despite this urban affinity, private practitioners can still play a pivotal role in decongestion of government tertiary level health care facilities, fill the specialist availability gap, and provide quality maternity services to their own existing client base. We have touched upon these important aspects in the revised introduction section of our manuscript.

We would also like to bring to the notice of reviewers that all the private practitioners we interviewed reported that their clientele comprised of women from both urban and nearby rural areas. Out of the 18 practitioners, 8 reported that more than half of their clientele were from surrounding rural areas. We have added this information in the first paragraph of our revised results section, in which we have described the profile of our respondents in details.

6. Your article provides no description of the schemes under scrutiny here; so I feel completely lost in putting the results and conclusions into context. Who are actually the beneficiaries, how many, which providers are eligible; how many (public & private) have been empanelled, which medical services are provided, how are these reimbursed, since when are private providers empanelled and was their participation ever since low (or have they become only recently eligible) etc?

We have added additional details of the scheme in the revised introduction section of our manuscript.

7. Without this information for instance the statement in the introduction that only X% of woman knew about empanelled providers is even less conclusive

We have added the details in the revised introduction section.

8. Jhpiego- purpose?

Jhpiego is a not-for-profit health organization which is affiliated with Johns Hopkins University and primarily works in the field of women's health. We have added the details in the introduction section of our manuscript.

9. If focus is on improving quality in the private sector- is it even better?

We have revised the introduction section of our manuscript where we have explained about the over burdening of public sector. Also, we have elaborated on the quality aspect. We are not commenting on the quality of services being provided in the private health facilities. However we have emphasized on the fact that by virtue of being enrolled in government's accreditation scheme, private facilities would fill in the existing gaps as they would be required to meet the benchmarks – as set by the government in their accreditation guidelines.

10. Results: please provide a summary of included providers (size of facility, location, empanelled or not, number of deliveries performed, etc)

We have added this information in the first paragraph of our revised results section.

11. On p. 19 you mention the view by the OP official that the scheme is very transparent and easy to enroll. So apparently there are contradicting perceptions in the two sectors on this?

This was stated by only one government official and we have added this information under the category of 'process of interaction with the government and administrative issues'.

12. P.22. statement:…and not just in health care? What is this supposed to mean?

We have clarified the same in the revised section under facility level barriers.

Private providers wanted to emphasize that a variation in quality of services being provided by the private sector can be expected in any service sector and is not just limited to health care services.
13. P 25: if the quality in the public sector is as low as you claim: why / how can the private sector feel that participation in a public scheme would brand them as of high quality? And Gaguly I believe reported the opposite, correct?
Those who get empaneled within the accreditation scheme are required to meet certain standards and criteria set under the guidelines. Also, there are regular quality checks carried out by government health officials. Hence, private health facilities which are accredited can claim to have met this standard criterion which adds value to their brand. We have further elaborated on this in the revised discussion section.
14. Discussion: you introduce some new results not mentioned in the respective section here (e.g. single most important factor was low reimbursement- not mentioned in the results section- as you have not summarized frequencies of responses there):
We have made the requisite changes in the results section.
15. And I felt confused by the statement on p. 28: although reimbursement rates were higher in Chirajeevi scheme the private sector considered these untenable. So, is increasing rates the solution? To which level would be required? And what in comparison to providing these funds to the public sector instead?
We have included the range of optimal payments (as stated by the providers) in the results section of our manuscript. This throws light on the expected reimbursements by the private practitioners.
We have highlighted the fact that due to their sub-optimal presence as well as inadequate human resources, public sector health facilities are unable to cater to maternity health care needs of the population. Therefore directing the funds to public health facilities may not yield the desired results.
16. P.28 the statement on CCT is not clear. Would it be possible that women receive these CCTs and then don't see a private but a public doctor to keep the money? Then this would be big incentive for not seeing the private provider. And you also mention vouchers in this context. So is it actually a voucher scheme?
We have revised the discussion section and clarified on how the scheme works in the introduction section of the manuscript.
17. P 30: the last few sentences are not clear. What is the NHM ecosystem?
We have revised the discussion section and clarified on the same.
18. Where is accountability under scrutiny? And how is supposed being held accountable by whom?
We have revised the discussion section and clarified on the same.
19. You mentioned oversight by the government of India. But roles and functions of central government vs. the state ones are not clear.
We have revised the discussion section and clarified on the same.

Reviewer: 3
1. On page 7 (line 130-136) Please mention the full form for JSY (Janani Suraksha Yojana) in its first mention. In my opinion, since the research study aims to identify the barriers and facilitators of public private partnership for pregnancy labor and delivery services, this paragraph/text about JSY is most important in the 'introduction" section but not well done. Authors must understand that the international readership of BMJ Open would not necessarily be familiar with Indian Government's JSY scheme and its other details that are required to follow this study. Therefore authors need to provide a clear, descriptive account explaining what JSY is, since when and what populations does it focuses, how exactly women/populations are incentivized for institutional delivery and in which healthcare sector, etc.
We have revised the introduction section of our manuscript and added more details about the JSY scheme as per the suggestions.
2. On page 7 (Line 142-143) Are Chiranjeevi yojna in Gujarat and Janani Sahyogi Yojana in Madhya Pradesh different forms or state-specific names of the National JSY in states Gujarat and Madhya Pradesh? I suggest the use word "state" when mentioning a state's name for first time.

They are different programs from JSY. They are state specific and directed towards improving quality of maternal health. We have made the requisite changes.
3. On page 7 (line 130) What do the authors mean by “Guidance is in place in India for creating effective partnerships”? As a reader I would wonder: what kind of guidance, whose partnerships with private sector, and for improving quality of what services. This is one example of unclear English used often in this manuscript. Please revise wherever required.
We have revised the introduction, results and discussion section of our manuscript as per the suggestions of reviewers.
4. On page 7 (line 126-129): The statement “can share burden of public sector facilities and decongest them” appear to be conjecture than evidence-based. Please provide references to some previous research studies, from different disease/healthcare areas, which found and supported that leveraging the private health sector in India would help provide better healthcare or medicine delivery in India, as seen in case of tuberculosis (http://bit.ly/2ejuXju); vaccines (http://bit.ly/1RhKXz5); diabetes (http://bit.ly/2fAo5hT) etc.
We would like to thank the reviewer for sharing relevant literature. We have added the references in the revised manuscript.
5. On page 8 (line 149-151): please clarify that the “(public-sector’s) partnership with the private sector facilities under JSY…” was very poor in what terms? The line (171-174), “Project also involved conducting low dose high frequency…and assessment” needs clarity”.
We have revised the introduction section of our manuscript as per the suggestions of reviewers.
6. On line 175 (page 9), study involved which “all these stakeholders”? In line 178 (page 9), please mention that “the 2 states” authors referring to are the states of Jharkhand and Uttar Pradesh?
We have made the requisite changes as per suggestion.
In the methods section:
7. The text in lines 187-193 (page 11) could be shorten without losing the content/message. Lines 203-205: maybe it’s not necessary to mention where the interviews as in line 191-192 (page 10) it is clear where interviews were conducted.
We have shortened the content (lines 187-193) as suggested. We have mentioned the place of interviews as it is required by the COREQ criteria (checklist for reporting qualitative studies).
8. In line 214 (page 12): It is unclear that the qualitative expert translated the interviews from which language to which? From local language (language A, Language B) to English !!
We have added the suggested information.
Results section:
This section could benefit from reducing the number of quotes from study participants and a relatively more detailed account reporting authors’ findings. Since this is a qualitative, narrative-oriented study, it is imperative that the authors are clear with their English, expression and tone. Please revise the manuscript for instances such as those mentioned below.
9. Please provide the available numbers/data (quantitative observations) where available. For instance: in line 238-239 (page 13), how big or small are these amounts to be unrealistic?
We have added this information and provided the range of reimbursements considered adequate by the private providers.
10. In line 254 (page 14), what does ‘rates’ mean? It would not be appropriate to have readers guess that the paper is referring to prices/reimbursements. Same for “charges” in line 261. Therefore, wherever need include the actual meaning in parenthesis after the vague words in quotes for clarity purpose.
We have made the suggested changes.
11. Who is “he” in line 282 (page 15), “this” in line 328 (page 18) and elsewhere; could you have so in parenthesis as done in line 317 (page 17)? And, “rigid policies” in line 303 (page 17) means? Whose advocacy in line 446 (page 25)? In lines 375-377 (page 21), what is not possible to do and at what place? I can guess but please provide details in [parenthesis].
We have added the information in parenthesis as suggested. We have elaborated on the ‘rigid policies’ in the revised corresponding section (line 497 – 499).

12. Please clarify “raising resources” in line 336 (page 19)? While I can guess what authors are referring to, the text needs to be explicit in this narrative based study.
We have clarified the same.
13. In lines 397-399, I think authors are referring to “PRIVATE” hospitals, please clarify? Also please spell out OT in line 397-398 (page 22). On page 12 (line 228): study subjects could be replaced with study participants as used by authors earlier. In lines 436-438 (page 24), while discussing private-sector participation, what do authors refer to as national level? Please clarify that “their” refers to private-sector in sub-heading in lines 555-556 (page 31).
We have made the requisite changes and clarified on things where suggested.
14. Regarding information technology use for linking healthcare and reimbursement information, could India use adhaar card interface? See Shiva et al (http://bit.ly/2ejotLX)
We have added this as a recommendation in our manuscript.
15. Regarding recommendations, it is possible to suggest some sort of coordination mechanisms between government ANC program and JSY program as several physicians complained about poor ANC among the clients as a major hurdle to success of JSY?
We have added a paragraph on recommendations at the end of discussion section.

VERSION 2 – REVIEW

REVIEWER	Dr. Meenakshi Gautham London School of Hygiene and Tropical Medicine, UK
REVIEW RETURNED	30-Jan-2017

GENERAL COMMENTS	The effort at revising the paper is appreciated, but the paper fails to build a clear rationale for the study objectives which appear to be a repeat of what is already known in the existing body of knowledge. The introduction lays out some newer themes, but the findings lack depth to explore these. The solutions suggested are not new and things like branding and technology have been and are being tried by the government (e.g. Hausla campaign), as well as in social franchising programmes, with varying success. The biggest barrier that you have found is related to the amount and process of financial reimbursements. As this barrier is quite well documented in research on PPPs, this study could have gone a step further and explored the barriers to implementing changes in the existing policies around financing PPPs - what will it take to change the reimbursements amounts..why is it not happening etc?. Another issue worth exploring could be the use of private sector expertise - like contracting gynaecologists (as you have mentioned in the introduction) instead of facility empanelments. These could provide a novel addition to the existing literature. The present paper is rather general and is not able to contribute sufficiently to what we already know. It may be more useful to focus on an in-depth exploration of the specific barriers in future. I wish you all the best.

REVIEWER	Abhishek Sharma Precision Health Economics, Boston, USA
REVIEW RETURNED	12-Jan-2017

GENERAL COMMENTS	Thanks for sharing the revised version of this article. The authors have done a good job addressing my comments; the introduction section now provides a clear background to the problem being studied and results presentation is in line with the expectations of a qualitative analysis. I just have a few minor suggestions below for

	the authors. In lines 96-98, the idea is to convey to wide variation in the utilization of private sector facilities for maternity care by SES/wealth strata. Therefore the authors could just present the range of % population using private sector between the lowest and highest wealth strata. For readers not familiar with India's wealth quintile classes may get bit confused. In line 125, is there a specific "n" for the batch of beneficiary payments that are reimbursed at a given time? Please provide the number if authors have that information as it will help readers understand (or have an idea) that how much delays these providers may face before they are paid/reimbursed. In line 328, instead of "were stopped by saturation sampling" I would say "were stopped when we reached response saturation i.e. when ..." In line 357, authors say "in most cases these were just obstetrician and gynecology practices, but some of them had hospitals". Do the authors mean that some of them owned or ran hospitals providing care in other specialties as well? While the authors did a good job at improving the clarity of interview quotes presented in this paper, some are unclear. The authors when using a pro-noun must mention in [parenthesis] that to whom those pronouns refer to. For instance (one of several cases): in lines 390-391, authors write "if we can involve them in accreditation with the government, then we can improve our institutional delivery percentage." Who is "we" and "them" here? Please clarify using [parenthesis], like "if we [government/district health officials] can involve them [private practitioners] in accreditation..." Similarly in line 515, put "[discharge]" after "send the patient home". In line 381, authors write "...improve access of quality services to would not be able to afford them, as well...". Just a typo but I think authors want to sat 'access of...services to those who otherwise are not able to afford..." Also check spelling of "scheme" (line 380). Some references lack authors (individuals or institution details) information like references# 7, 11, 13, 15, 23, 24 etc, please revise as per BMJ guidelines. I really like the "transparency in reimbursements to and services provided by private providers" aspect mentioned in discussion/recommendations by authors. The authors could perhaps elaborate on what they mean by transparency and how could it be achieved. For accountability and fraud-prevention/monitoring purposes, would it be good to have these DE-IDENTIFIED data (payments, services provided, an healthcare indicators at first point of patient-providers contact, antenatal care status, medications, C-sections, patient income levels etc, region) recorded and published on publicly-open/accessible websites so that researchers/media could assess these aspects and hold government and private providers accountable. This may also help monitor if there are higher proportions of C-sections that what perhaps are needed? Regarding above comment, the authors discuss possible applications of adhaar - as discussed by Shiva Raj Mishra in Lancet DE article http://bit.ly/2iKAFs0 - card for reimbursements and data collection purposes. The same article could be cited and discussed

	from transparency and monitoring aspects. In line 428, I could use the phrase "for public health reasons since participation..." instead of "for charitable reasons since participation...". The word charity when coming from authors some where reiterate the unfortunate Indian belief that healthcare is for those who can afford it and for others it's because of charity. The participation will go up because of government's initiative to reimburse the practitioners for delivery of public's "public health" human rights NOT charity. The sentences in lines 502-506 are repetition of "amounts offered under the scheme were unrealistic given...". Authors can merge these two sentences. Good luck,

VERSION 2 – AUTHOR RESPONSE

While we respect the reviewer's point of view, we – the authors of this manuscript – believe that findings of our study are a valuable addition to the existing evidence on public private partnerships (PPPs) for maternity care especially from the point of view of influencing policy for improving partnerships in resource-constrained settings. Below are the points which support our stance –

1. The objective of our research study was to explore the perceptions of various stakeholders on the expectations, benefits, barriers and facilitators for private sector to effectively participate with government led schemes – specifically Janani Suraksha Yojana (JSY) - for maternity service delivery. Before designing the study, we did an extensive review of the existing literature. **We did not come across any published study which specifically explored the facilitators and barriers to private sector participation in JSY.**

2. There are a few studies which have explored the challenges related to state specific PPP schemes - like Chiranjeevi yojana (CY) of the state of Gujarat, Mamta Friendly Hospital Initiative (MFHI) of the state of Delhi, Yukti Yojana (YY) of Bihar etc. Most of the literature pertains to CY scheme of Gujarat. However, we strongly feel that findings or evidence from these studies cannot be applicable or generalizable to a national level scheme like the JSY. Neither can it be applicable to other states of India. JSY is a scheme which is run by the federal government of India across all states. Schemes like CY are confined to particular states in India. These schemes are structurally very different from JSY. The empanelment structure and the costs reimbursed under them are very different from that of JSY. Also, states like Gujarat and Delhi are relatively well-off both economically as well as in terms of health indices. Maternal mortality ratio (MMR) – reduction of which is the primary aim of such PPP schemes - is much better in Gujarat (112) when compared to the national MMR (167). Thus, findings from these states are not automatically generalizable for other states in the country. **On the other hand, UP & Jharkhand – where our study was done, are still lagging behind (MMR in UP is 285 and in Jharkhand is 208). Both these states are included in the Empowered Action Group (EAG) of states.** EAG is a group of 8 states which together account for nearly half of India's population and they have been identified as the states needing the maximum focus by Government of India owing to their relatively higher fertility and mortality indicators. **Therefore, evidence on PPP for maternity care from these regions of the**

country is very important and also vital for informing policy. Even if some findings are similar to the findings from other studies/states; they assume importance from a policy making perspective by virtue of being from the high priority regions of the country.

3. Studies on state specific PPP schemes have included only private practitioners as study participants. On the other hand, our study included **ALL important stakeholders** – private practitioners, the government officials at both federal and state levels, and members of professional bodies like FOGSI as study participants. Our study explored the perceptions, experiences and expectations of all these stakeholders and hence our findings **give a holistic view** of the issues related to PPPs under JSY. Each theme that emerged from analysis of our data has been explored from the perspective of both private practitioners as well as government officials – something which is unique to our study. For example, If low reimbursement amounts emerged as an important theme – we have presented the perceptions & expectations of both private practitioners and government officials on the same. Thus, this congruence of views of both the private providers and downstream government officials on this being an important challenge for effective partnership provides for a strong basis for the policy makers at the national level to take policy decisions on this aspect.

4. Some of our findings – like **client level barriers and facility level barriers** and facilitators for successful empanelment are unique and important findings which have not been reported in other similar studies. We believe that these are important findings which should be considered when formulating future policies on the matter.

5. We also believe that our study is **most relevant to the current context**. Most of the published papers on state specific PPP schemes are dated. These state specific schemes were launched at a time when National Health Mission (NHM) had just been initiated (in 2005). The country was just exploring public private partnership for improvement at that juncture, but, most of the national focus was on strengthening the public sector health system.

   However, things have changed and evolved over the last decade. Currently there is huge impetus on PPP for maternal health at a national scale. The prime minister of India just launched the Pradhan Mantri Surakshit Matritva Abhiyan (PMMSA) scheme across the country which hinges upon private sector participation for providing high-quality ANC services. The national government is now more open for partnering with private sector for a wide range of non-health and health care service provision including Maternal Health, Family Planning, and Universal Health Care. Influencing the growth of and ensuring contribution of private healthcare sector in making healthcare system more effective, efficient, rational, affordable, ethical, and safe is a key objective of the Draft National Policy of India, 2015. Thus, findings of our study are relevant not only for maternity schemes, but also for similar public-private partnership schemes in setting up the principals of engagement based upon mutual trust, transparency in systems, and protecting financial interests of the private sector.